

## APPENDIX A

# LEVELS OF MILITARY MOUNTAINEERING

*Military mountaineering training provides tactical mobility in mountainous terrain that would otherwise be inaccessible. Soldiers with specialized training who are skilled in using mountain climbing equipment and techniques can overcome the difficulties of obstructing terrain. Highly motivated soldiers who are in superior physical condition should be selected for more advanced military mountaineering training (Levels 2 and 3) conducted at appropriate facilities. Soldiers who have completed advanced mountaineering training should be used as trainers, guides, and lead climbers during collective training. They may also serve as supervisors of installation teams and evacuation teams. Properly used these soldiers can drastically improve mobility and have a positive impact disproportionate to their numbers. Units anticipating mountain operations should strive to have approximately ten percent of their force achieve advanced mountaineering skills.*

### A-1. LEVEL 1: BASIC MOUNTAINEER

The basic mountaineer should be a graduate of a basic mountaineering course and have the fundamental travel and climbing skills necessary to move safely and efficiently in mountainous terrain. These soldiers should be comfortable functioning in this environment and, under the supervision of qualified mountain leaders or assault climbers, can assist in the rigging and use of all basic rope installations.

a. On technically difficult terrain, the basic mountaineer should be capable of performing duties as the “follower” or “second” on a roped climbing team, and should be well trained in using all basic rope systems. These soldiers may provide limited assistance to soldiers unskilled in mountaineering techniques.

b. Particularly adept soldiers may be selected as members of special purpose teams led and supervised by advanced mountaineers. Figure A-1 lists the minimum knowledge and skills required of basic mountaineers.

c. In a unit training program, Level 1 qualified soldiers should be identified and prepared to serve as assistant instructors to train unqualified soldiers in basic mountaineering skills. All high-risk training, however, must be conducted under the supervision of qualified Level 2 or 3 personnel.

<ul style="list-style-type: none"><li>• Characteristics of the mountain environment (summer and winter).</li><li>• Mountaineering safety.</li><li>• Use, care, and packing of individual cold weather clothing and equipment.</li><li>• Care and use of basic mountaineering equipment.</li><li>• Mountain bivouac techniques.</li><li>• Mountain communications.</li><li>• Mountain travel and walking techniques.</li><li>• Hazard recognition and route selection.</li><li>• Mountain navigation.</li><li>• Basic medical evacuation.</li></ul>	<ul style="list-style-type: none"><li>• Rope management and knots.</li><li>• Natural anchors.</li><li>• Familiarization with artificial anchors.</li><li>• Belay and rappel techniques.</li><li>• Use of fixed ropes (lines).</li><li>• Rock climbing fundamentals.</li><li>• Rope bridges and lowering systems.</li><li>• Individual movement on snow and ice.</li><li>• Mountain stream crossings (to include water survival techniques).</li><li>• First aid for mountain illnesses and injuries.</li></ul>
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**Figure A-1. Level 1, basic mountaineering tasks.**

#### **A-2. LEVEL 2: ASSAULT CLIMBER**

Assault climbers are responsible for the rigging, inspection, use, and operation of all basic rope systems. They are trained in additional rope management skills, knot tying, and belay and rappel techniques, as well as using specialized mountaineering equipment. Assault climbers are capable of rigging complex, multipoint anchors, and high-angle raising/lowering systems. Level 2 qualification is required to supervise all high-risk training associated with Level 1. At a minimum, assault climbers should possess the additional knowledge and skills shown in Figure A-2.

<ul style="list-style-type: none"><li>• Use specialized mountaineering equipment.</li><li>• Perform multipitch climbing:<ul style="list-style-type: none"><li>– Free climbing and aid climbing.</li><li>– Leading on class 4 and 5 terrain.</li></ul></li><li>• Conduct multipitch rappelling.</li><li>• Establish and operate hauling systems.</li><li>• Establish fixed ropes with intermediate anchors.</li></ul>	<ul style="list-style-type: none"><li>• Move on moderate angle snow and ice.</li><li>• Establish evacuation systems and perform high-angle rescue.</li><li>• Perform avalanche hazard evaluation and rescue techniques.</li><li>• Be familiar with movement on glaciers.</li></ul>
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**Figure A-2. Level 2, assault climber tasks.**

#### **A-3. LEVEL 3: MOUNTAIN LEADER**

Mountain leaders possess all the skills of the assault climber and have extensive practical experience in a variety of mountain environments in both winter and summer conditions. Level 3 mountaineers should have well-developed hazard evaluation and safe route finding skills over all types of mountainous terrain. Mountain leaders are best qualified to advise commanders on all aspects of mountain operations, particularly the preparation and leadership required to move units over technically difficult, hazardous, or exposed

terrain. The mountain leader is the highest level of qualification and is the principle trainer for conducting mountain operations. Instructor experience at a military mountaineering center or as a member of a special operations forces (SOF) mountain team is critical to acquiring Level 3 qualification. Figure A-3 outlines the additional knowledge and skills expected of mountain leaders. Depending on the specific AO, mountain leaders may need additional skills such as snowshoeing and all-terrain skiing.

<ul style="list-style-type: none"><li>• <b>Recognizing and evaluating peculiar terrain, weather, and hazards.</b></li><li>• <b>Preparing route, movement, bivouac, and risk management plans for all conditions and elevation levels.</b></li><li>• <b>Using roped movement techniques on steep snow and ice.</b></li><li>• <b>Performing multipitch climbing on mixed terrain (rock, snow, and ice).</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Performing glacier travel and crevice rescue.</b></li><li>• <b>Establishing and operating technical high-angle, multipitch rescue and evacuation systems.</b></li><li>• <b>Using winter shelters and survival techniques.</b></li><li>• <b>Leading units over technically difficult, hazardous, or exposed terrain in both winter and summer conditions.</b></li></ul>
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**Figure A-3. Level 3, mountaineer leader tasks.**